NEW LOCALITY RECORDS FOR SOME AUSTRALIAN FISHES

By Gilbert P. Whitley, F.R.Z.S.
Contribution from The Australian Museum, Sydney.

(Figures 1-5)

Partly as a result of field work but mainly through identifying many fishes acquired during recent years by the Australian Museum, I have come across the following species which are either new to the Australian fauna or unrecorded from certain States of the Commonwealth.

1. New Records for Australia.

Choerojulis gymnocephalus (Bloch & Schn.). Green Id., Queensland (Austr. Mus. regd. No. IB.3119).
Dischistodus notophthalmus (Blkr.). Green Id., Q. (IB.3115).
Enchelyurus flavipes (Peters). Lady Musgrave Id., Q. (IB.2873, part).
Ctenochaetus strigosus (Bennett). Between 17° and 19° S. lat., Great Barrier Reef, Q. (IA.2135).
Herreolus formosus (Smith). Heron Id., Q. Under slabs of sandrock, April, 1953. Mr. F. A. McNeill (IB.2958). This species was also collected by A. R. McCulloch in the New Hebrides (IA.769).
Chaetodon guntheri Ahl. Off Byron Bay, N. S. Wales (IB.2473).
Pseudomonacanthus macrurus (Bleeker). Cape York, Q. (I.469).

Family CHROMIDAE.

Genus CHROMIS Cuvier, 1814.

CHROMIS HUMBUG, sp. nov.

(Figure 1.)

D. xii, 13; A. ii, 13?; P.c. 17. L. lat. 15 tubes. Sc. 25 to hypural. Tr. 3/1/9.

Head (6mm.) 3, depth (9) 2 in standard length (18). Eye (2.7) 2.2 in head and subequal to depth of caudal peduncle and to second anal spine. Anterior profile angularly pointed, a dip over eye before predorsal convexity. Preoperculum with incipient serrae, other opercles smooth. Mouth small, reaching third of eye. Teeth small, conic, not flaring outwards. Mandibular ramus not steeply ascending. Head scaly, except snout, mouth, and chin. Two rows of cheek-scales.

No. 1. lat. on tail, the tubes ending 1½ scale-rows below posterior dorsal spines. No auxiliary scales.

Middle dorsal spines longer than the second one. Fin lobes all pointed, longest upper caudal ray equals head-length. Dorsal and anal fins naked, apart from basal scales. Caudal forked, without free spines.

General colour creamy-white, with two broad blackish bands; the first from above eye and nape towards lower parts of head which are black-dotted, the second descending from 4th to last dorsal spines and membranes towards vent. Faint grey stripe along each scale-row. Viscera and upper parts of body infuscated. Eye blue. Pectoral axil white. Fins mostly white; caudal without dark margins. Anterior anal and ventral margins dusky.

Described and figured from the unique holotype, 18mm. in standard length or 0.9 inches long (Austr. Mus. regd. No. IB.3116).

Loc.—Green Island, off Cairns, Queensland.

Differs from its allies notably in coloration, which is dark and light barred, like the fishes, known as "humbugs," in the related genus *Tetradrachmum*.

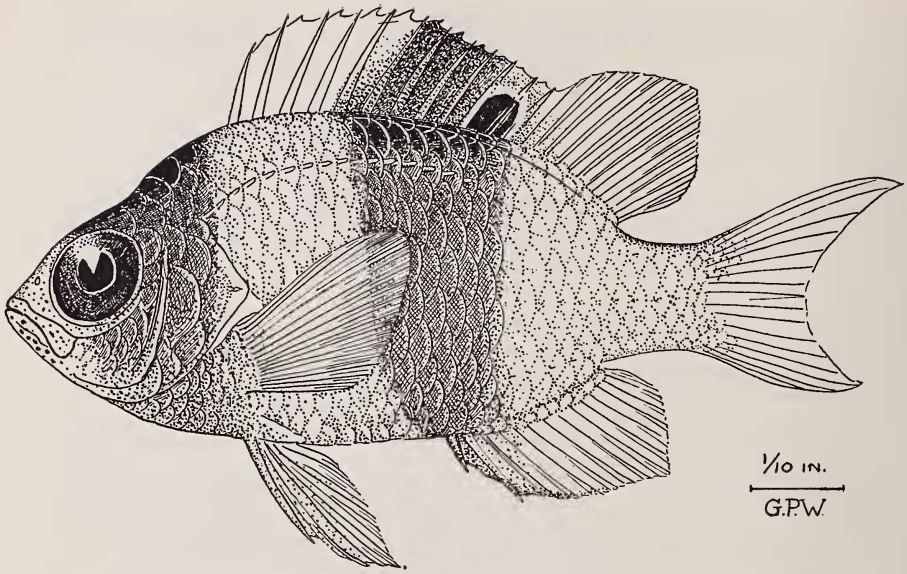

Figure 1.—Two-barred Demoiselle, *Chromis humbug* Whitley. Holotype.

Family ATHERINIDAE.

Genus ATHERINOSOMA Castelnau, 1872.

ATHERINOSOMA ROCKINGHAMENSIS Whitley.

(Figure 2.)

Atherinosoma rockinghamensis Whitley, Proc. Linn. Soc. N. S. Wales lxviii, Sept. 15, 1943, p. 132.

This species was discovered by the late George Grigg in a brackish or freshwater, landlocked lagoon, near Rockingham, south-western Australia. It is here figured for the first time from the holotype (Austr. Mus. regd. No. IA.7710), which has the following characters: D.v/10; A.i,10; P.14 (3rd longest). Sc. 38 Tr. 7 to 4½ on caudal peduncle. Predorsal 14, interdorsal 7 scales. Dark lateral stripe along 4th scale-row. About 14 slender gill-rakers on lower half of first branchial arch; longest about half eye and subequal in length to premaxillary processes.

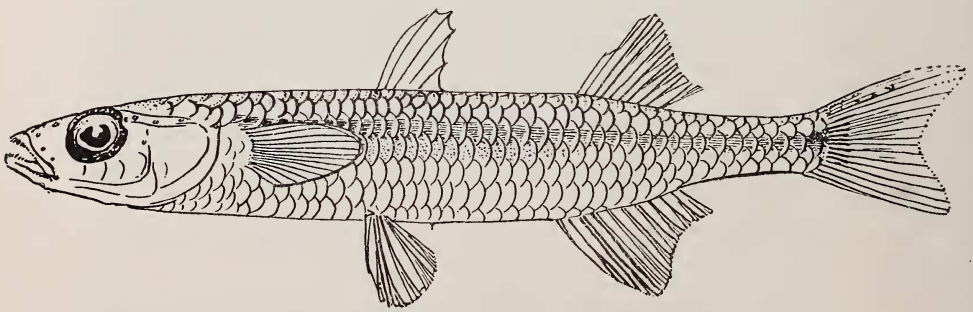

Figure 2.—Hardyhead, *Atherinosoma rockinghamensis* Whitley. Holotype.

Family SYNGNATHIDAE.

CHOEROICHTHYS SUILLUS MALUS, subsp. nov.

D.20. Rings 17 plus 15; subdorsal 2½ plus 2. Antorbital crests and median ridge of snout serrated. Spines of posterior tail-rings each with more than one point. Brown, head with blackish stripes. Caudal fin large, its outer and median rays cream, others dark brown. 2½in. long. Otherwise as in *C. suillus suillus* Whitley (Rec. Austr. Mus. xxii, 1951, p. 393, fig. 2). Holotype of new subspecies (No. I.7154) in Australian Museum from Masthead Island, Queensland.

Family EPINEPHELIDAE.

EPINEPHELUS SUMMANA HOSTIARETIS, subsp. nov.

D. xi, 15 or 16; A. iii, 8 or 9; P. 16. L. lat. about 63 to hypural.

Three rows of teeth at sides of mandible. Gill-rakers short, 9/20 on first arch. Caudal rounded. Pale green or light brown, mostly covered by a network of darker brown wavy markings. Some light round spots on unpaired fins which are narrowly margined white. A black "moustache" mark. About 13in. Queensland. Differs in scale-counts, etc., from typical Red Sea *summana* (Bonnaterre, 1788).

Family STIGMATONOTIDAE, nov.

A new family name for *Stigmatonotus australis* Peters, 1877, (figure 3), which has usually been placed in Pseudochromidae, but it differs in having a shorter body, maxillary large and scaly and extending below eye, preopercle denticulate, and eleven dorsal spines, instead of only two or three.

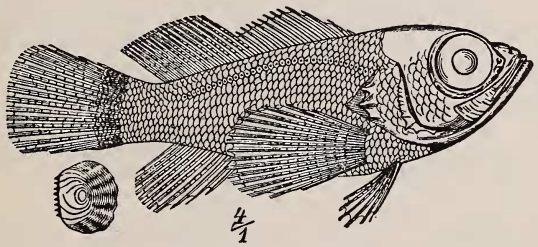

Figure 3.—Dottyback, *Stigmatonotus australis* Peters. Holotype from Dirk Hartog Id., W. Australia. After Peters.

Family GOBIIDAE.

Genus CTENOGOBIUS Gill, 1858.

YOGA, subg. nov.

Orthotype, *Ctenogobius* (*Yoga*) *pyrops*, sp. nov.

Differs from *Amblygobius* in having upper lip not covered and in coloration and formulae. Has larger teeth and fewer scales than *Cryptocentroides*. Scales more numerous and caudal rounder than *Amoya*. The number of scales is higher than in most *Ctenogobius* spp. and lower than in *Cryptocentrus* spp. The goby described below is apparently intermediate in characters between the genera mentioned (for refs. to literature, see Neave, Nomencl. Zool., or recent reviews of Gobiidae), linking them together, so I suggest the new subgeneric name, *Yoga*, meaning yoke, for it. The squamation (about 55 transverse series of scales) and the pear-shaped orbits are useful diagnostic features.

CTENOGOBIUS (YOGA) PYROPS, subgen. et sp. nov.

(Figure 4.)

D. vi, 12; A. 11; P. 16; V. i, 5; C. 13 main rays. Sc. *c.* 55. Tr. *c.* 22, at second dorsal and anal, to 8½ on caudal peduncle. No predorsal scales (except in young).

Head (21 mm.) 3.7, depth (16) 4.9, breadth of body (12) 6.5 in standard length (78). Eye, 4mm.; snout, 6; postorbital, 12; interorbital, 3.2; depth of caudal peduncle, 10; depth of gill-opening, 11; predorsal length, 24.

No ocular tentacle or nuchal crest, barbels or fleshy flaps. Head rather tumid and bulbous; profile convex. Head, pectoral base and much of breast naked. Rows of minute genipores. Upper lip exposed; lower jaw slightly jutting; tip of maxillary ensheathed; mouth barely reaching below front of eye, not opening widely. Teeth of both jaws in several rows, the outer of which is enlarged with conic teeth, largest anteriorly and halfway along sides of lower jaw where the canines cease. Tongue rounded, not notched. Interorbital tumid, with one central pore, followed by another in the median line. Anterior nostril with short tube. Groove from eye to top of opercle. Chin transversely folded. Eyes mostly in anterior third of head, pyriform, apex towards interorbital. Isthmus broad.

Form rather rounded in transverse section and slightly compressed. Scales ctenoid. Anal papilla small. Dorsal spines slender, the sixth separated from the group of the first five, third longest (14mm.). Dorsal bases contiguous. Anal rays fringed. No silky pectoral rays. Ventrals not reaching vent, united like those of *Gobius*. Caudal irregularly rounded, shorter than head.

Colour in formalin, pale yellow with indistinct small light brown patches along back (six double patches each side of dorsal fins) and along midline of sides. A few short grey bars on opercle, which has a diffuse blue patch. Eye blue. Dorsal with brown spots and flecks; few dark spots on first dorsal spine. Anal infuscated brown, with pink margin. Fins mostly pale.

Described and figured from the holotype, a specimen, 3¾ inches long, from Karumba, Gulf of Carpentaria, Queensland (Assistant Pilot Anton de Witte, 1953) Dept. Harbours & Marine, Brisbane collection, regd. No. 3074.

The Australian Museum has two much smaller paratypes (No. IA.3756) collected by Mr. Melbourne Ward at Thursday Island, Queensland. They are 45 and 59mm. long. They have five conspicuous dark blotches along middle of each side; the posterior dorsal and upper caudal rays are dark-spotted; and there are some predorsal scales but they are difficult to distinguish.

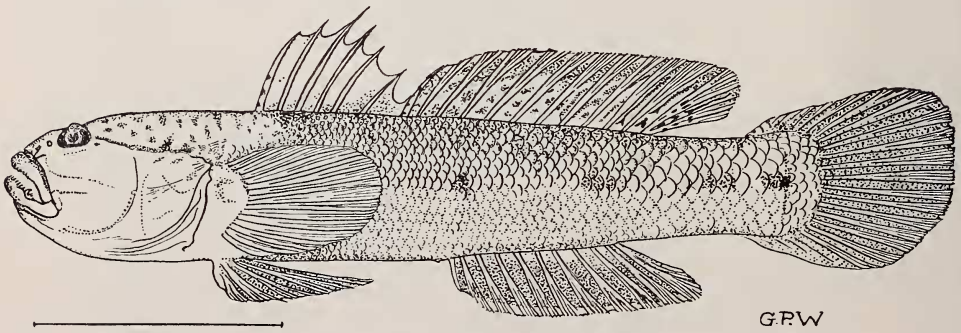

Figure 4.—Goby, *Ctenogobius* (*Yoga*) *pyrops* Whitley. Holotype.

This new goby comes at the bottom of McCulloch & Ogilby's key (Rec. Austr. Mus. xii, 1919, p. 205) which may be thus modified:

zz. Nape naked.

1. Less than 10 anal rays, less than 50 scales.
   Freshwater, Central Australia .... *Chlamydogobius eremius*
2. More than 10 anal rays, more than 50 scales.
   Marine, tropical ..... *Ctenogobius* (*Yoga*) *pyrops*

Ctenogobius culionensis Herre (Fish. Zool. Mus. Stanford i, Herre Exped., 1934, p. 84) from the Philippines has Sc. 56 and Tr. 24, but only 8 anal and 9 dorsal rays, and the maxillary extends beneath middle of eye. Typical *Ctenogobius* (*fasciatus* Gill) from Trinidad has tongue emarginate, eye more than $\frac{1}{4}$ head, space between dorsal fins equal to orbit, and longer pectoral fins.

2. New Records for the Northern Territory.

When I was aboard the M.V. "Stanley Fowler" seeking tuna for the C.S.I.R.O. Division of Fisheries in 1949, some of the following were incidentally caught.

Triaenodon apicalis Whitley. Evans Shoal, Arafura Sea, 6 Oct. (IB.2546).

Elagatis bipinnulatus (Quoy & Gaimard). Lynedoch Bank, 5 Oct.

Paradicichthys venenatus Whitley. Evans Shoal, 6 Oct.

Indocybium semifasciatum (Macleay). Between Darwin and Point Charles, 20 Sept. to 1 Oct. Mature males, L.C.F. 584 to 761mm.

Cybium queenslandicum (Munro). Near Parry Shoal, 5 Sept.

Evenchelys macrurus (Bleeker). Darwin (IA.7713).

Uropterygius concolor Ruppell. Yirrkala (IB.480): figure 5.

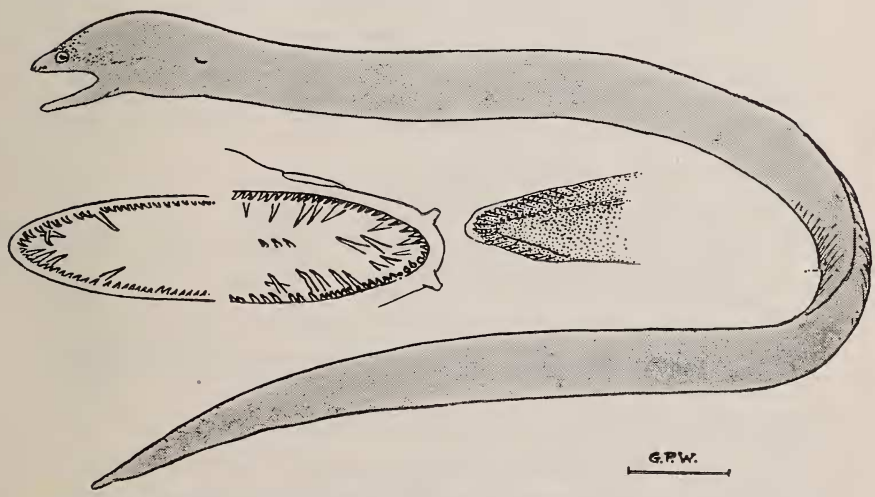

Figure 5.—Eel, *Uropterygius concolor* Ruppell. A specimen from Yirrkala, with (inset) its dentition (left) and tip of tail (right).

Saurida undosquamis (Richardson). Charles Point and Croker Island (IA.7712 and I.12570).

Choeroichthys serialis (Gunther). Port Darwin (IB.4401).

Amneris rubrostriata (Ramsay & Ogilby). Yam Creek (A.4819), Howard Creek (IA.7727-7729) and Mataranka (IB.1934-1938).

Sillago analis Whitley. Melville Island (IB.648).

Megalaspis cordyla (Linne). Near Peron Islands, in stomach of *Cybium* (self) and English Company Islands (photo from Mr. Eric Worrell).

The commonest tuna was *Euthynnus alletteratus* (Rafinesque) in the Timor Sea, and *Katsuwonus pelamis* (Linne) was taken near Sahul Bank.

Aprion virescens placidus Whitley. Timor Sea, 6 Oct. 1949.

Lutjanus coatesi Whitley. Sahul Bank, Lynedoch Bank, Evans Shoal and Flinders Reef, Sept.-Oct. 1949.

Batrachomoeus dahli (Rendahl). Cape Bedwell and Melville Island (IA.7847 and 7856).

Abcichthys praepositus (Ogilby). Darwin (IA.2487).

Antennarius asper Macleay. Darwin (IB.2419).

3. New Records for Queensland.

Besides the fishes new to Australia listed above, I note the following.

Amphiprion melanopus Bleeker. Green Id. (IB.3114).

Graviceps alexanderi Whitley. Masthead Id. (I.7117-8) and Two Isles (I.14029).

Xiphasia setifer Swainson. Dunk Id. (I.12500).

Scorpaenopsis diabolus (Cuv. & Val). Heron Id. (IB.2975).

Urocampus carinirostris Cast. Southport and Port Denison (IA7366, 1808).

Hirundichthys katoptron robustus Gunther. Off Rockhampton (IA.3608).

Devisina wilsoni (Whitley). Whitsunday Passage (IA.918).

Ostreogobius microphthalmus (Gunther). Southport (IA.7393-7394).

Paratrigla papilio (Cuv. & Val.). Off Pine Peak, 24 to 26 fathoms, 1st Oct. 1910 (E.2847).

Pterophrynoides histrio (Linne). Near Cooktown (I.7719).

Some of these Queensland fishes were recently collected by Mr. F. A. McNeill when with Colonel J. K. Howard, who was collecting for American museums. I am grateful to Col. Howard for affording me an opportunity of examining many of his Australian specimens before they were shipped and for presenting to the Australian Museum examples of special note.

4. New Records for New South Wales.

Thrissina aestuaria (Ogilby). Grafton (IB.2765).

Polydactylus specularis (De Vis). Grafton (IB.2764).

Polyprionum oxygeneois (Bl. Schn.). Off Beecroft Head, 60 to 80 faths., 19 Aug., 1953 (IB.3134).

Caranx papuensis All. & Macl. Trawled near Sydney, 6 July, 1948 (IB.2151).

Velifer multiradiatus Regan. Off Norah Head, 40 to 50 faths. (IB.2870).

Allotaius spariformis (Ogilby). Nambucca Head, 2 July, 1953 (IB.2987).

Glyphisodon palmeri Cockerell. Bunnerong, Botany Bay, 12 Jan., 1949 (IB.2208).

Scarichthys auritus Cuv. & Val. Clarence River.

Salarias atratus Macleay. Clarence River (IB.608).

Cyttus mccullochi Whitley. Bermagui, 8th Jan. 1954. 22in., 6lb. (IB.3152).

Parioglossus rainfordi McCulloch. Gundamaian, Port Hacking (IB.12).

Forcipiger longirostris (Broussonet). Maroubra, 14th Oct. 1954 (IB.3160).

Ferdauia lindemanensis Whitley. Malabar (IB.2920).

Auxis thynnoides Bleeker. Newcastle (IB.1804).

Cantherines brunneus (Cast.). Coff's Harbour (IB.1695).

Antennarius tuberosus (Cuvier). Near Terrigal.

5. New Records for Western Australia.

Amentum carpentariae (De Vis). Off Tubridgi Creek, North-West Cape (IB.3085).

Caranx bucculentus All. & Macl. Off Tubridgi Creek, North-West Cape (IB.3081).

Gazza dispar (De Vis). Off Tubridgi Creek, North-West Cape (IB.3083).
Equulites moretoniensis (Ogilby). Off Tubridgi Creek, North-West Cape (IB.3084).
Equulites hastatus (Ogilby). Hampton Harbour, Dampier Archipelago (IB.3070).
Scolopsis regina Whitley. Hampton Harbour, Dampier Archipelago (IB.3071).
Parachaetodon ocellatus (Cuv. & Val.). Hampton Harbour, Dampier Archipelago (IB.3055 and 3094).
Phrynelox striatus (Shaw & Nodder). Wallabi Island, Abrolhos; April, 1949 (IB.2330).
Siphamia cuneiceps Whitley. White Island, Shark's Bay (IB.3044).
Hypodytes carinatus (Bl. Schn.). Exmouth Gulf (IB.3005).
Tetraroge leucogaster (Rich.). Exmouth Gulf (IB.2984).
Moolgarda delicata (All. & Macl.). Cygnet Bay (IB.2629) and Depuch Island (IB.2637).
Asterropterix semipunctatus (Ruppell). Western Australia (I.13268).
Polydactylus specularis (De Vis.). Exmouth Gulf and North-West Cape (IB.3008, 3012, 3013 and 3089).
Zenarchopterus dispar (Cuv. & Val.). Depuch Island (IB.2640).
Epinephelus forsythi Whitley. Scott Reef (IB.2633).
Aprion virescens placidus Whitley. Woodbine Bank (IB.2634).

Mr. K. Godfrey kindly collected most of the above Westralian specimens as well as many other better-known fishes, during surveys with prawn-trawls in north-western Australia aboard M.V. "Lancelin" in July to Sept., 1952. The four last-named were submitted by Dr. D. L. Serventy, also on behalf of C.S.I.R.O., after the M.V. "Warreen" cruise 35 of 1949.

6. New Records for South Australia.

Cyneichthys anolius (Cuv. & Val.). Chinaman Creek, south of Port Augusta (S.A. Mus. F.2645). 3¼in. long.
Paraploactis trachyderma Bleeker Near Cape Jervis, 11 faths., weedy bottom (F.2659).
Plectroplites ambiguus (Richardson). Diamantina River, near Clifton Hills (H. M. Hale, in lit., Jan. 1936).
Emmelichthys nitidus Richardson. In shoals off South Neptune Island, Nov. 1948.
Navodon australis (Donovan). From stomachs of tunas.

7. New Records for Victoria.

Trudis caeruleopunctatus (McCulloch). Portarlington (IB.2119-20).
Galaxias longbong Macleay. Near Albury, Murray River (IB.2763).
Argentina elongata Hutton. Seined off Port Phillip, March 1949 (IB.2345).
Xiphias estara Phillipps. Frankston, Port Phillip, Nov. 1950.
Genypterus microstomus Regan. Trawled 70 to 100 fathoms, off Cape Everard (I.12138).
Lepidotrigla modesta Waite. 70 to 80 fathoms, off Cape Everard (IA.3903).
Tetragonurus cuvieri Risso. Off Gabo Island, 88 faths. Nearly 20in. long, early March 1952 (IB.2772).

8. New Records for Tasmania.

Mora dannevigi Whitley. Bass Strait to south-eastern Tasmania; deep water.
Xiphias estara Phillipps. Stranded, East Inlet, Stanley, April 1952 (Miss Maude Leggett, *in lit.*, 20 June 1952).
Cochleoceps spatula (Gunther). Wineglass Bay (I.13005) and on kelp, Oyster Bay (I.10410).
Arenigobius bifrenatus (Kner). West Arm, Tamar River (IB.1980).
Paratrigla papilio (Cuv. & Val.). Dredged, D'Entrecasteaux Channel (IA.4103-4).

I wish to thank donors of specimens who have made the above records possible.

Family ELEOTRIDAE, auctt. = GOBIOMORIDAE,
SHIPWAYIA, Whitley, 1954.

Orthotype, *Eleotris aurea* Shipway (W.A. Nat. ii, 4, May 17, 1950, p. 75, figs. 1-2. Murchison R., W. Australia) = *Shipwayia aurea.*

A new generic name (Whitley, Austr. Mus. Mag. xi, 5, 1954, pp. 152 & 155, fig. 1) was necessary for this species which has been well described and figured by Bruce Shipway, after whom I name it.

Eleotris Scopoli (Intr. Hist. Nat., 1777, p. 456) was the first latinization of Gronow's non-binomial name and the genotype, by tautonymy, is *Gobius eleotris* Linne (Syst. Nat. x, 1758, p. 263), a Chinese species in which, according to Osbeck, "the ventral fins have eight rays, and are joined together into one infundibuliform fin"—yet modern authors use *Eleotris* for gobies with separated ventral fins. Hence *Eleotris* is one of the Gobiidae and Eleotridae should be renamed Gobiomoridae.

In McCulloch & Ogilby's key to the genera of "Eleotrinae" from Australia (Rec. Austr. Mus. xii, 1919, pp. 257-258) *Shipwayia* comes into section "*jj. Interorbital space naked,*" which may be modified as follows:

1. Scales 37-40. Body moderately elongate .... *Gobiomorphus*
2. Scales 45-50. Body deeper, nape humped ..... *Shipwayia*
3. Scales 27-35 ..... *Carassiops*

Incidentally, the following synonymy is suggested:
Eleotris adspersa Castelnau, 1879 = *Mogurnda pallida* (Cast. 1875).

Family ANOSTOMIDAE.
STUPENS, gen. nov.

I take this opportunity to propose a new name for *Camposichthys* Whitley (Rec. Austr. Mus. xxiii, 1953, p. 134) preoccupied by Travassos (Summa Brasil Biol. i, 9, 1946, p. 132) for another genus of fishes.

Orthotype, *Stupens simulatus* (Eig. & Eig., originally *Curimatus*).

Family ONEIRODIDAE.
BERTELSENNA, gen nov.

Orthotype, *Dolopichthys gladisfenae* Beebe (Zoologica xiii, 4, 1932, p. 86) = *Bertelsenna gladisfenae.*

New name for *Spiniphryne* Bertelsen (Dana Rept. 39, Dec. 18, 1951, pp. 72, 75 & 122) preoccupied by *Spinophrynus* Koch (Atti Soc. Ital. Sci. Nat., 90, 1951, p. 90), a genus of Coleoptera.

SUPPLEMENTARY NOTES ON GOBIES

By Lily Ivey

In the *Proceedings* of this Society for 1949-50 (1951, pp. 55-57), particulars of the habits of some gobies (*Waiteopsis paludis* Whitley) in captivity were reported. Here are some further observations.

On 31st June, 1951, I noticed two baby fish, like tiny threads of grey silk in the aquarium; I removed the few snails in case they might help to destroy other eggs. However, no more little ones arrived, and the two continued to grow well for some eight months, when one disappeared—the body was never found. The other is now (31 March, 1953), full-grown and vigorous, in all respects like his forbears. Until he was about a year old he stayed most of the time under the "rocks," but now he swims gaily and rests across the weed as the others do. Up to six months ago he remained dark in colour; now he is sometimes a sandy grey. I have never seen him leave the water or blow bubbles, in fact all of them have stopped doing those things and behave like ordinary freshwater fish.

No more little ones have appeared so far—better luck in the future perhaps.